We Claim:

1. A method for establishing a voice call between a calling station connected through a subscriber line to a first PSTN to a called station connected through a subscriber line to a second PSTN, comprising the steps of:

formulating in said first PSTN a first common channel signalling message for routing the call, said message including data identifying the calling subscriber line;

transporting information in said common channel signalling message to said second PSTN through a separate data internetwork;

extracting data identifying the calling subscriber line at a switching system in said second PSTN; and

sending said extracted information to the called subscriber line while completing routing of said call.

2. A method as recited in claim 1, wherein said sending step occurs while the called subscriber line is in an on-hook state, whereby a party at the called station may identify the calling party before answering the call.

3. A method as recited in claim 1, wherein said sending step occurs if the called subscriber line is in an off-hook state whereby a party at the called station may identify the calling party while another call is in progress.

4. A method as recited in claim 1, further comprising the step of storing said extracted information in said switching system if said call is terminated without being answered at said called station.

5. A method as recited in claim 4, further comprising the step of automatically placing by said switching system, after termination of said call, a second call from said called subscriber line to said calling subscriber line in response to entry of a predefined code at said called station.

6. A method as recited in claim 4, further comprising the step of automatically sending said stored information from said switching system to said called subscriber line in response to entry of a predefined code at said called station after said call has been terminated, whereby a party at the called station may identify the calling party.

7. A method as recited in claim 1, wherein said data network is Internet, and said transporting step comprises TCP/IP protocol conversion.

8. A method as recited in claim 7, wherein said transporting step further comprises:

accessing a data base from a first gateway router that interfaces between said first PSTN and the Internet;

identifying from said data base a second gateway router that interfaces between said second PSTN and the Internet, whereby said call is to traverse the Internet between said first and second gateway routers; and

sending a TCP/IP protocol message to said second gateway router.

9. A method as recited in claim 8, wherein said transporting step comprises converting the TCP/IP protocol message to a common channel signaling protocol message by said second gateway router for receipt by said switching system.

10. A method as recited in claim 9, wherein the common channel signaling protocol message received by said switching system includes information identifying the calling subscriber line and information identifying said second gateway router and said extracting step

comprises distinguishing caller subscriber line identification from gateway router identification.

11. A communications system comprising:

a first public switched telephone network (PSTN) including a plurality of subscriber lines and central office switching systems, each subscriber line connected to a respective central office switching system and having an assigned directory number, a voice network portion comprising voice communication paths for connection to the subscriber lines, and a common channel signaling network portion comprising signaling paths interconnecting said central office switching systems through at least one signal transfer point;

a second PSTN, remote from the first PSTN, and including a plurality of subscriber lines and central office switching systems, each subscriber line connected to a respective central office switching system and having an assigned directory number, a voice network portion comprising voice communication paths for connection to the subscriber lines, and a common channel signaling network portion comprising signaling paths interconnecting said central office switching systems through at least one signal transfer point;

a wide area internetwork connecting spaced dissimilar networks and using transmission control

protocols/internet program (TCP/IP) to link said dissimilar networks; and

first and second interfaces linking said first PSTN and said second PSTN respectively to said wide area internetwork to establish a transport path for a voice call from a calling subscriber line of said first PSTN to a called subscriber line at said second PSTN, each of said interfaces comprising a controller controlling the set-up of connections between said calling subscriber line and said called subscriber line via said common channel signaling networks in the respective PSTNs;

wherein said controller in the interface linking the first PSTN provides calling subscriber line identification information to the common channel signaling network of said first PSTN during set-up of the call.

12. A method for providing caller identification information for a voice call dialed from a subscriber line that traverses a plurality of diverse transport paths including at least a first public switched telephone network (PSTN) to which a called subscriber line is connected, a data internetwork, and a second PSTN to which the calling subscriber line is connected, said method comprising the steps of:

establishing a route for said call through said second PSTN to a first gateway connected to said data

internetwork, said establishing step comprising conveying calling subscriber line information and dialed digit information to said first gateway;

routing said call through said data internetwork from said first gateway to a second gateway that interfaces with said first PSTN;

transporting the conveyed information to said second gateway;

initiating a call connection by said second gateway to said calling subscriber line via said first PSTN for completion of routing of said call; and

supplying identification of said calling subscriber line to said called subscriber line upon completion of the routing.

13. A method as recited in claim 12, wherein said supplying step occurs while the called subscriber line is in an on-hook state, whereby a party at the called station may identify the calling party before answering the call.

14. A method as recited in claim 12, wherein said supplying step occurs while the called subscriber line is in an off-hook state whereby a party at the called station may identify the calling party while another call is in progress.

15. Apparatus for use in a telecommunications system having a plurality of diverse paths for transporting a voice call, said paths traversing at least a first public switched telephone network (PSTN) to which a called subscriber line is connected, a data internetwork, and a second PSTN to which a calling subscriber line is connected, said apparatus comprising:

a server connectable to said data internetwork for interfacing with said first PSTN, said server comprising a connection to said first PSTN and means for providing information to said first PSTN that identifies said calling subscriber line;

whereby calling party identification is conveyed to the called subscriber line by said first PSTN upon routing of said voice call.

16. Apparatus as recited in claim 15, wherein said first PSTN comprises a switching system to which said connection is coupled, said connection being recognizable by said switching system to enable extraction of calling subscriber line identification information from said means by said switching system.

17. Apparatus as recited in claim 16, wherein said connection is an ISDN connection.

18. Apparatus as recited in claim 16, wherein said connection is a Feature Group connection.

19. A method for providing caller identification information for a voice call, originating from a remote calling telephone subscriber line, to a called telephone subscriber line comprising the steps of:

routing an initial voice call, originated by a calling party at said remote calling telephone subscriber line location and dialed to said called telephone number, through a data internetwork to a gateway router interface;

in response to said routing step, placing a subsequent call from said gateway interface through a public switched telephone network (PSTN) to said called subscriber line;

linking said initial voice call at said gateway with said subsequent call, and

transporting the originating calling telephone subscriber line identification information from said gateway through said PSTN to said called subscriber line while said called subscriber line is in an on-hook condition.